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Introduction:

Project ACE (Active, Connected and Engaged) is a theory-informed, pragmatic intervention using peer volunteering support to promote active ageing.

The ACE intervention was one of the outcomes of a 12-month collaborative network, AVONet, that used a range of approaches to identify best bet physical activity (PA) promotion strategies for older adults¹. This study aimed to establish the feasibility and acceptability of the intervention.

Methods:

Fifty four older adults were recruited as volunteers (**Activators; n=15**) or intervention recipients (**ACERs; n=39**). ACERs were randomised to either one-to-one support by a peer volunteer or a waiting list control group. Recruitment and retention rates were recorded.



Outcome measures

- Physical activity:** Assessed with accelerometry (Actigraph GT3X) at baseline, 3 and 6 months (post-intervention). Data reduction was performed to derive, sedentary time (<100 CPM), light (lifestyle) PA (500-1952CPM) and MVPA (>1951 CPM)².
- Lower limb function:** Assessed with the Short Physical Performance Battery (SPPB) which includes tests of leg strength, walking speed, and balance³.
- Activities profile:** At baseline and 6 months participants reported the activities they did for fun, recreation, health or fitness.

Motivational processes

A process evaluation questionnaire at baseline, 3 and 6 months explored how the underlying theoretical framework, the **Process Model for Lifestyle Behavior Change** was operationalised. It assessed changes in:

- Confidence to get out and about and social support; and
- autonomy, competence, relatedness as measured by the Basic Needs Satisfaction-General Scale (BNS-GS) (Gagne et al., 2003).

Participant characteristics:

Eighty five percent of ACE participants provided data at both baseline and 6 months.

76 interested Activators:

154 interested ACERs:

- 20 returned sign-up forms
- N=15 Activators paired with ACERs
- All Activators completed the ACE programme
- 65 returned sign-up forms
- 40 consented
- N= 39 ACERs took part in the intervention
- 2/13 (female/male)
- Mean age 68.7 (SD 4.4)
- 5 widowed; 7 single/divorced; 3 married
- 18/21 (female/male)
- Mean age 74.7 (SD 7.4)
- 14 widowed; 11 single/divorced; 14 married

Results:

As hypothesised, ACERs in the intervention group reported more activities outside home (Table 1) and a greater number showed physical function improvements at follow-up than those in the control group (Table 2).

Table 1. Activities outside the home at baseline and follow-up

	Control (n=9)	Intervention (n=22)
	Mean no. per week (±SD)	
Baseline	5.83 (3.46)	4.39 (3.75)
Follow-up	5.22 (3.40)	6.34 (4.15)*

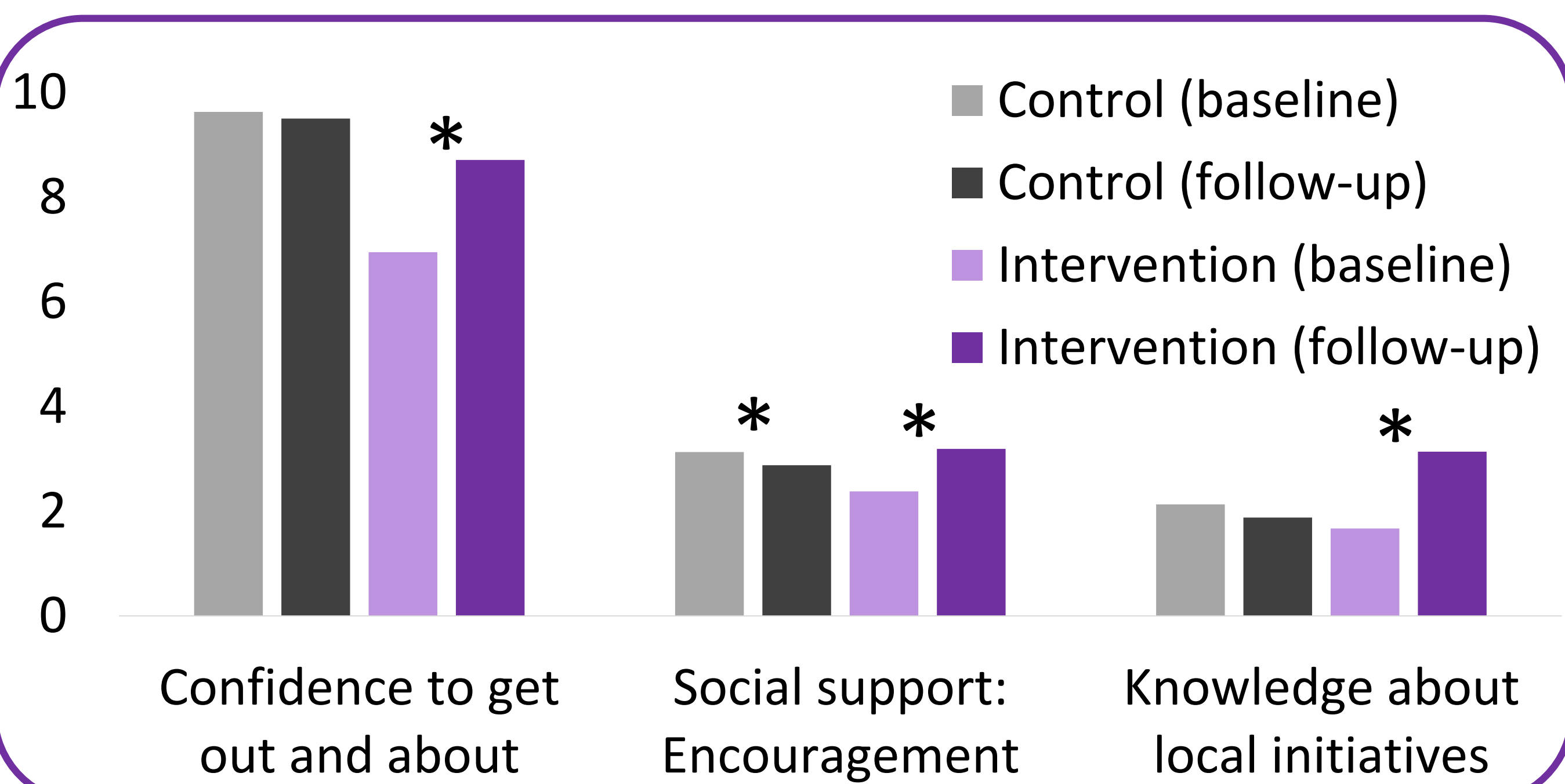
* p<0.05

Table 2. Proportion (% [n]) that reduced or increased lower limb physical function (PF) between baseline and follow-up

	Control (n=9)	Intervention (n=22)
	% (n)	
Reduced PF	55.6 (5)	27.3 (6)
Increased PF	11.1 (1)	50 (11)

Table 3. Proportion (%) that reduced or increased physical activity between baseline and follow-up

	Control (n=9)		Intervention (n=22)	
	Reduced	Increased	Reduced	Increased
Lifestyle	12.5	62.5	29.4	58.8
MVPA	37.5	62.5	35.3	47.1



* p<0.05

Figure 1. Changes in motivational processes

At 6 months, the intervention group showed significantly improved general confidence to get out and about, increased confidence in the face of specific barriers, increased knowledge of local initiatives and increased social support (Figure 1).

Conclusions:

- ACE is feasible and can help older people to get out and about more, improve their confidence and engage more with their community.
- Recruitment is an important area for improvement prior to a definitive pragmatic trial.
- ACE has already been adopted and delivered by LinkAGE – Bristol.
- ACE was one of only two UK initiatives to be rated as a promising practice by Public Health England⁴.

References:

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